Application No.: 10/564,311 Amendment Date: 25-Oct-07 Reply to Office Action of:

04 Oct 07

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS**:

1.	(Currently amended): A method of evaluating compounds which are
effective for trea	tment or prevention of obesity comprising:
a)	
i)	a step in which a test compound is administered to or contacted with a test
animal or a test of	<del>cell, and</del>
ii)	a step in which it is confirmed whether or not said test compound
regulates express	sion levels of LCE gene or a gene which is functionally equivalent to said gene,
in said test anima	al or test cell. or
——	
i)	a step in which a test compound is contacted with a test animal or a test
cell possessing a	fusion gene comprising an expression regulatory region of LCE gene and a
reporter gene, an	<del>d</del>
ii)	a step in which expression of said reporter gene in said test animal or test
cell is assayed; o	<del>r</del>
c)	
i)	a step in which a test compound is contacted with LCE protein and
ii)	a step in which it is confirmed whether or not said test compound exhibits
an effect on the a	activity of said protein <del>; or</del>
d)	
i)	a step in which a test compound is contacted with a plurality of elongase
proteins includin	<del>g LCE,</del>
ii)	a step in which the activities of said plurality of elongase proteins are
assayed, and	
iii	a step in which test compounds are selected which inhibit LCE activity
among said plura	ulity of elongase proteins.

Claims 2-21 (Cancelled)

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Claim 22 (New):

The method of Claim 1 wherein the effect is an inhibition

of LCE activity.

Claim 23 (New): A method of evaluating compounds which are effective for treatment or prevention of obesity comprising:

- i) a step in which a test compound is contacted with a plurality of elongase proteins including LCE,
- ii) a step in which the activities of said plurality of elongase proteins are assayed, and
- iii) a step in which test compounds are selected which inhibit LCE activity among said plurality of elongase proteins.

Claim 24 (New): The method of Claim 23 wherein the effect is an inhibition of LCE activity.